

Antenna Information

The Model 4100 Implantable Pulse Generator antenna is a 30AWG wire antenna contained within the cable that connects the battery with the transmit module. Its length is approximately 12 inches. The antenna is used for both receiving the 2.45GHz wakeup signals from the EBR Programmer as well as transmitting and receiving the Medical Implant Communication Service (MICS) frequency band of 402MHz to 405MHz. The antenna is connected to the radio at transmit module end via a weld connection to a feedthrough. It is open at the battery end. The antenna wire material is MP35N with a 41% silver core. This well known biocompatible material is commonly used for pacemaker leads. MP35N is an alloy composed primarily of Cobalt, Nickel and Molybdenum.

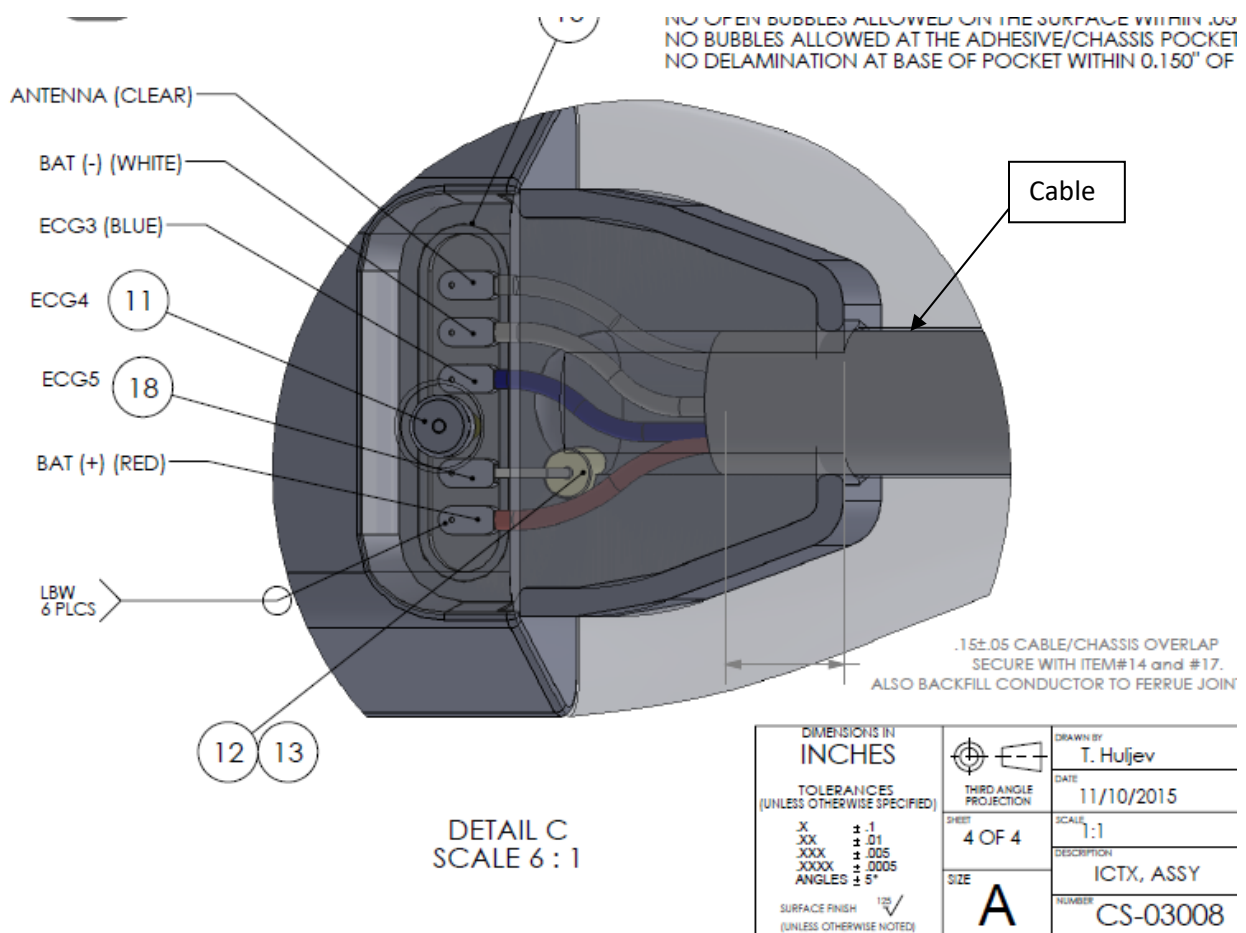


Diagram showing Antenna wire in cable attached to feedthrough

On the opposite side of the feedthrough, inside the case, the antenna port from the PCBA is soldered onto the feedthrough with a typical solder joint.

The gain of the antenna is -23 dBi.